Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

On the water proof composition of Chalk, Tar and Sand, for covering roofs, and its introduction into Ireland, by Mr. William Bevans.

TO THE EDITOR OF THE HEAD OF ARTS, MANUFACTURES, &C. FOR THE BELFAST MAGAZINE.

SIR,

In answer to your's of the 8th inst. wherein you request to know the particulars concerning the tar composition for roofing houses, and also an account of the first introduction of it into Ireland, I don't know that I can do any thing better than to give you the same directions that I have given to other people. The composition was a discovery of Lord Stanhope's, who covered his own house with it, about thirty years ago; it has been frequently used at different places in England of late years, by Mr. Nash the architect, and was first introduced into Ireland by him in covering Killymoon castle. He sent over a person on purpose to do it, who had been instructed, by Lord Stanhope's man. Mr. Agnew of Kilwaughter sent a person to Killymoon to learn the art, and covered part of his house with it, and I understand that he has instructed a man of the name of Gillmore, who I have been told has done a good deal of it in Belfast, but I understand that he has made some alterations in the manner of doing it, whether it will be any improvement or not, time will show. Mr. Nash has an invariable rule never to let any but men of experience do it. For although it appears very simple, it requires a great exactness, and a deal of attention to be paid to it; there have been some gutters done with it, but it is not recommended for them, and never used for that purpose in England; I would never recommend any person to try it from written instructions, for as it is a most invaluable discovery, it would be a great pity that it should get a bad name by falling into the hands of inexperienced men. I am Sir, your obedient servant, William Bevans.

DIRECTIONS FOR THE TAR COMPOSITION.

If you are going to cover a house with a flat roof, you must put in joists as for a lead roof; if the bearing should be long, you must have trussed beams; give the roof a fall of 2 inches in 8 feet; on the joists put battins, 2 inches broad, and ¾ thick; which must be laid half an inch asunder; then cover the battins with slates, bedded in mortar; tiles are in general used in England, but I prefer slates, and they are easiest got in this country; the composition is laid on in two coats, the first consists of tar and chalk only, and is called the skimming coat, and the last the finishing coat; the first consists of 3 measures of chalk to one of tar, with as much sand stirred into it as you can; the chalk must be perfectly dry, pounded very fine, and sifted through a fine sieve; the sand must be of three grists, the coarsest about one eighth of an inch, and the finest to be quite fine, it should be sifted through two sieves, one of an eighth of an inch mesh, and the other quite fine so as to take the dust out, great care must be taken in setting the boiler, that the fire does not touch it, for if the flame touches the pot it burns the tar; the fire had therefore best be brought round the sides of the pot alone (by a flue) and not be set under the bottom at all; the tar and chalk should be measured and mixed in a box. The boiler may be nearly filled with it then for the first coat, but for the last coat one third of the boiler must be kept vacant for sand; when it is all in, put on a good fire, and keep stirring it with an iron server (made like a small spade) there is no limited time for boiling, but perhaps three or four hours, will be about sufficient; to know when it is done, dip a bit of slate into it and put it into cold water to cool; when it done, you can make a slight impression on it with your thumb-nail, but not with your thumb; an ironing stove should be ready heated, to make the trowels hot, while the composition is boiling; which when ready must be spread out as thin as you can, and as fast as possible, letting it run into every crevice. The composition will boil up quite thin if the tar be good. This coat will turn water for some-time; over it lay the finishing coat, the composition for which is exactly the same, and to be boiled the same time as directed in the skimming coat, and when done the sand is to be put in and mixed well up with the server; put in the sand plentifully for you can scarcely put in too much; mix all well up; when done draw the fire, leaving only as much as will warm the servers and pots *(for carrying it up to the roof)* your trowels must be quite warm or the stuff will not spread; it must be spread half an inch thick, taking care to smooth the joinings well down, so as to make them disappear, which can only be done with a hot trowel; a small fire should be put under the boiler at first to keep the servers warm for mixing the chalk and tar.

Observations...The person alluded to, by Mr. Bevans, as having instructed Mr. Gillmore, in making the composition, is (we have reason to suppose from a letter received on the subject) Mr. Neilson; who has been "for the last four years in the employment of Edward Jones Agnew esq. of Kilwaughter, managing and superintending his buildings."

As it appears from the last mentioned letter, that some mistakes have arisen relative to a paper in No. 19 on the same subject, it is thought proper to state that its insertion did not originate from any application of Mr. Gillmore, that the gentleman who wrote it had no acquaintance with him, and merely mentioned his name as an attentive workman, who had executed the work mentioned in a substantial and satisfactory manner; that the information was procured at his desire by a friend of his, from Mr. Gillmore; and that had the names or the works of other persons who were equally well acquainted with the composition, been known at the time, they would have been as willingly mentioned as his, and that the only motive which the writer had for the publication, was the service of the public, in conveying to them useful information on such subjects; which it is part of his business to do, having undertaken to prepare the head of discoveries and improvements in arts, manufactures, &c. for this magazine; which head he has compiled, and furnished the remarks for since last August. Steps were taken shortly after the publication of No. 19, to procure information from Mr. Bevans on the subject by the intervention of a friend of his, as soon as it was known that he was concerned in the introduction of the composition into Ireland, and if this information could have been got sooner it would have been inserted before this.

It is hoped this plain statement of facts, will prevent in future the person who sent the letter alluded to, from mistaking his own conjectures for proofs, and induce him to make some inquiries as to the circumstances he thinks fit to descant on, before he again attributes to the writers for this work, motives for their publications, which never even were subjects of their imagination.

Method of constructing houses with earthen walls by Mr. Robert Salmon of Woburn.

Trans. Soc. Arts, v.27.

This method is that which has long been practised in France, under the denomination of *pise* building: in it earth is rammed in between molds, as shall be described, to form the walls, and the molds are withdrawn and elevated to form new portions of it till the whole is completed. Mr. Salmon's improvements on the French plan, consist principally in using iron bolts for connecting the sides of the molds, instead of wooden ones, and in fastening them with iron keys, instead of with ropes drawn tight by twisting them with levers.

The sides of Mr. Salmon's mold, consist each of leaves twelve feet long, twenty inches broad, and one inch thick, the boards of which are grooved and tongued together, and are connected and strengthened by several pieces of wood nailed across them. Holes are made through these pieces of wood, at top and bottom (guarded by iron plates to prevent them from wearing) to receive iron bolts, which hold the two frames parallel to each other, fourteen or sixteen inches a-